

REMARKS

Claims 1, 3, 4 and 6-46 currently appear in this application. The Office Action of February 5, 2004, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicants respectfully request favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

Election/Restrictions

It is noted that the election requirement has been made final. Claims 16-42 have not been cancelled in the event they are re-joined at the close of prosecution.

Priority

It is noted that the foreign priority is acknowledged.

Drawings

The drawings are accepted by the Examiner for examination purposes only.

Information Disclosure Statement

The Examiner alleges that no proper Information Disclosure Statement has been filed.

The Examiner's attention is respectfully drawn to the Information Disclosure Statement filed July 2, 2002, which included a PTO 892 and copies of the cited documents.

Rejections under 35 U.S.C. 101

Claims 1-6 and 8-15 are rejected under 35 U.S.C. 101 because the claimed invention is said to be directed to non-statutory subject matter.

This rejection is respectfully traversed. The claims have been amended to recite "a purified α -isomaltosylglucosaccharide-forming enzyme."

Rejections under 35 U.S.C. 112

Claims 1 and 2-15 depending therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner alleges that the phrase "substantially increasing the reducing power" is vague.

This rejection is respectfully traversed. Attention is directed to MPEP Section 2173.05(b) D:

The term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F. 2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F. 2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ 2d 2010 (Fed. Cir. 1988).

Claims 2 and 3-15 dependent therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites "substantially incapable of."

This rejection is respectfully traversed. Claim 2 has been canceled and there are no longer any claims depending from claim 2.

Claims 4 and claims 5-15 dependent therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites "substantially increasing the reducing power."

This rejection is respectfully traversed. Attention is directed to MPEP Section 2173.05(b) D:

The term "substantially" is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F. 2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation "to substantially increase the efficiency of the compound as a copper extractant" was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F. 2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation "which produces substantially equal E and H plane illumination patterns" was definite because one of ordinary skill in the art would know what was meant by "substantially equal." *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ 2d 2010 (Fed. Cir. 1988).

Claims 4 and claims 5-15 dependent therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 reads "50°C or lower."

This rejection is respectfully traversed. The claims have been amended to recite "up to about."

Claims 4 and claims 5-15 dependent therefrom are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the phrase "having a stable pH region."

This rejection is respectfully traversed. Claim 4 and claims depending therefrom have been amended to recite specific pH ranges.

Claims 8-11 are rejected because the invention appears to employ novel microorganisms.

This rejection is respectfully traversed. Submitted herewith is a copy of a deposit receipt for four microorganisms made under the Budapest Treaty. The strains will be irrevocably and without restriction or condition

released to the public upon the issuance of a patent on the present application.

Claims 1-4, 6-8 and 12-15 are rejected under 35 U.S.C. 112, first paragraph, because the specification is said to be not enabling for any such enzyme isolated from any or all sources including recombinant mutants and variants and having a broad molecular weight ranging from 74,000 to about 160,000 Daltons, or the broad isoelectric points claimed, or the thermostability ranges claims.

This rejection is respectfully traversed. Claim 1 has been amended to define the claimed enzyme with more particularity. The enzyme has been claimed with its partial amino acid sequence and molecular weight in addition to the action of the enzyme. It is believed that Experiment 5-1 on pages 69-71, Experiment 8-1 on pages 81-83, Experiment 12-1 on pages 97-99 and Experiment 16-1 on pages 112-114 provide enablement for the subject matter as recited in amended claim 1.

Claim 4 has been amended to recite the genus of the microorganism from which the claimed enzyme is obtainable. The physicochemical properties have been amended in conformity with those of the enzymes derived from the recited microorganisms.

New claim 44 is directed to an enzyme obtainable from another genus of microorganisms, namely, the genus *Arthrobacter*.

Rejections of claim 5 are rendered moot by the cancellation of claim 5.

Claims 1-3 and 6-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

This rejection is respectfully traversed. The claims have now been amended to recite the specific SEQ ID numbers of the enzyme.

Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Amendments to the Specification

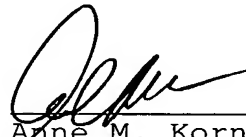
The specification has been amended to correct typographical and syntactical errors. No new matter has been added.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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